

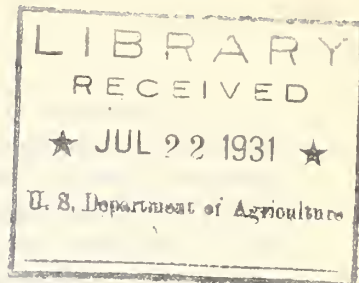
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Bureau of Biological Survey



SUGGESTIONS ON TRAPPING COYOTES AND WOLVES IN ALASKA\*

By Harlan H. Gubser, Leader, Predatory Animal Control, Alaska District  
Division of Predatory Animal and Rodent Control

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Need for Control

The coyote, an animal comparatively new to Alaska, is found in nearly all parts of the mainland in the Territory--from Hyder on the southeast to the Arctic coast at Point Barrow, where it made its first appearance in 1930. For several years it has been found in the Porcupine River district on the northwest, and last year there were two trapped at the mouth of Stony Creek, near the mouth of the Kuskokwim River, on the southwest. Localities in which the coyote first made its appearance are to-day greatly suffering from its depredations, and unless a determined effort to control its increase is put forth by every individual interested, the same condition may soon be found throughout the entire Territory.

Coyotes prey upon the various kinds of waterfowl, ptarmigan, and grouse, both by destroying nests and by killing. Their food habits are similar to those of the fox and of many other fur bearers, and under this new competition for food these valuable animals can not increase as rapidly as they would otherwise.

\*Suggestions on trapping methods and reports of new methods that have proved successful in Alaska will be welcome. They should be sent to Harlan H. Gubser, Leader, Predatory Animal Control, Post Office Box 885 Juneau, Alaska.

Furthermore, the coyotes prey upon fox pups, and occasionally kill an adult fox. Consequently, according to trappers' reports, the number of these fur bearers has seriously decreased where the coyote has made its appearance; and where coyotes are most numerous, there are now practically no foxes, though formerly they were plentiful. Nearly 5,000 persons, 7 per cent of the entire population of Alaska, are engaged in trapping, and thus are vitally affected by the depredations of these animals.

Among mountain sheep, deer, moose, and caribou, coyote depredations are confined principally to the killing of young fawns and lambs. The wolf kills both adults and young; yet it is thought that this predator is not so serious a menace to game mammals as is the coyote, because when a wolf kills one adult it has a supply of food to furnish several meals, while the coyote, preying principally on the young, kills many more animals to obtain the same quantity of food. The coyote is also the more prolific.

The coyote has only recently made its appearance in the reindeer section of Alaska, and if unchecked is likely to become a serious handicap to the development of the growing reindeer industry. The success of this industry, as well as the future abundance of fur and game, depends to a great extent on the control of both coyotes and wolves. An appeal is therefore made to all trappers to equip themselves with suitable traps and scent materials, and to help in controlling these new destroyers of birds, game and fur mammals, and reindeer and other livestock in the Territory.

#### Equipment for Trapping

For trapping coyotes, the No. 3, No. 4, No. 14, and No. 114 traps are satisfactory. The No. 114 is especially recommended for wolf sets. As few dealers carry a complete stock of these large traps, it is usually necessary to place orders early in order to obtain needed equipment.

A trapping kit should include, in addition to the necessary traps, the following articles: 1 piece of canvas 3 feet square; 1 garden trowel; 1 pair of wire pliers and a few feet of pliable wire; 1 bottle of scent material and an extra empty bottle in which to place the gall and anal glands of animals captured; and a pair of canvas gloves that are used for no other purpose than for trap setting. A pair of 18-inch nutcracker-like wooden clamps with a wire ring at one end is an excellent addition for snow work, especially where large traps are used.

All traps should be protected from rust, which may hold human scent. A very good preventive is a tea made by boiling 1 bushel of hemlock bark 1 hour in 20 gallons of water. After the bark is removed the traps should be boiled at least 15 minutes in the tea. In localities where hemlock is not common, alder bark and leaves may be substituted. It is not well to use paraffine, oils, and other such rust preventives on traps, as the odors may cause the animals to become suspicious and avoid the sets.

#### Preparing Scents for Lures

Trapping is more successful if lures are used. The best lures thus far developed are the natural scents of the animal and fetid scents.

Natural scent.--The natural scent of the coyote or wolf is the most successful scent material. As urine, however, is rarely to be obtained from a trapped animal, it is necessary

to prepare a box or cage in which to place a trapped coyote or wolf, preferably an old female. The box must be made of substantial material and should be large enough to house the animal comfortably. A hole as big around as a 1-pound coffee can should be cut in the front corner of the cage, and a can of the same size to hold drinking water should be inserted from underneath, flush with the floor. The bottom of the cage should be lined with tin, brought up a short distance on each side and nailed securely to the sides, to act as a trough. At the back end of the cage, a tin floor trough should be arranged to drain the urine into a can placed outside the cage. When the coyote (or wolf) is placed in the box, a chain should be attached to its neck, passed through the front of the cage, and fastened to a solid object outside. This will keep the animal from turning around in the cage and from getting away if it should break out.

A captive coyote or wolf will not eat at first. When it becomes accustomed to its new surroundings, however, and begins eating, it should be given as much food and water as it will take. To get animal scent before a wolf or a coyote is available for the purpose, a dog, preferably a female in "heat", may be kept in the cage.

Fetid scent.---In preparing fetid scent material, the hunter must always be sure that the receptacle does not smell of any foreign odor, such as gasoline or kerosene, and that the scent material is kept where it will not absorb other odors that might destroy its value. It should be remembered that the coyote or wolf may shy away from the set because of odors a person might never detect.

If fish is used for base scent, the oily varieties, such as suckers, are preferable because they retain their characteristic odor in cold weather much better than do other varieties. The bones should be removed; and the fish cut or ground into small pieces, placed in a container (a glass jar preferred), and left in a reasonably warm place for at least six months (a year is much better). The more thoroughly the fish is rotted, the greater degree of cold it withstands. The same method may be followed in making a base scent of brains.

It is always wise to use a variety of scent materials and to remember the kind of scent used at each set, so that the same kind may not be used again at the same place. A great many varieties may be made by adding to the base the following ingredients, either singly or in combination: Tonquin musk, civet musk, deer musk, beaver castor (finely ground), oil of rhodium, zinc valerate.

To make 1 gallon of fetid scent, a convenient quantity, there should be added to 3 quarts of fetid material 1/2 pint of glycerine (more if scent is to be used in weather colder than 30° (F.) below zero), 1 ounce of zinc valerate, 1 dram of oil of rhodium (pure), and 1 dram of musk of any of the varieties named.

### Setting the Traps

Places for sets.---Great care must be used in placing the sets. One good location--an open space on a point where the animals go to survey the surrounding country, the base of such a point, the intersection of two trails, the confluence of two streams, an old carcass, a pass in a ridge, or a distinctive point along a wind-swept ridge--is worth several promiscuous settings. Sets should be made on the highest point of a trail, unless the trail crosses a pass between two hills, when they should be made at the crossing. Coyotes



and wolves will invariably visit a "lone" tree or a conspicuous large boulder. A "scratching post" of coyotes or wolves is the best place for a set, but a low object such as a bunch of grass is suitable. A rather tall tuft of grass is good for a snow set.

Making the sets.---The following directions for setting a trap should be noted carefully:

After a place for a set has been selected, lay out the canvas setting cloth and place all refuse on it. Cut a hole that will just receive the trap and the peg or drag, which should be placed directly underneath the trap. (The hole should be deep enough for half an inch of dry, fine earth or dry grass under the trap, and an inch of fine, dry dirt as a cover above the trap.) Put a stick or chip under the loose side of the jaw, and be sure that the trap is set solidly, so that if the animal first steps on any part of the trap it will not move. Then tamp in around and over the trap--springs more fine, dry dirt so that it is made practically as solid as the surrounding ground. Using moss or canvas as a covering for the pan, sift over the entire setting about half an inch of the finest earth that can be found. (This dusty earth may be picked up under windfalls, cutbanks, or rocks and carried along the route, to be used when wanted.) Finally, place on top some of the soil that is common about the set, and leave it looking like the surrounding surface.

Trail sets.---A set without scent may be made directly in a trail by placing a trap on each side of a log or stick extending across the trail. This set should show no sign of disturbance; if it does the animal will step out of the trail or jump over the traps.

Scent sets should be off to one side of the trail, a trap being placed on each side of the scratching post or in each approach to the scent.

When fetid scent is used, it is well to go over the entire trap line and set all the traps, then return and place the scent; for if the fetid scent container is handled each time a set is made, the trapper's gloves become saturated and the odor gets on the traps and on the covering of the set. This attracts the attention of the animal to the particular spot where the traps are set, the very thing that must be carefully avoided. The fetid scent is a lure appealing to an animal's curiosity and not to its hunger. The scent material should be placed 6 to 12 inches from the traps and in such manner that the animals will come in contact with the traps in their natural approach to the scent. It is better to soak a piece of cotton or wool with the scent than to pour it on the ground. The scented cotton or wool should be buried in the ground or snow, to keep mice or birds from carrying it away. A piece of bark should also be placed over it to shed the rain, for a steady downpour soon destroys the value of the best scent material. In southeastern Alaska, where the rainfall is great, it is still better to place the scent in a small uncorked glass vial and bury it in the moss or ground, at an angle to shed the water.

In using animal scent on the trap-line, a 2-trap set is best. The traps should be on each side of the scent post, 12 to 18 inches apart (depending on the size of the object they are set against). As the traps are set the trap-line should be scented with droppings taken from the cage (3 or 4 droppings to a set) and with natural scent on a piece of cotton or wool placed about 10 inches directly back of the traps. The animal will not be suspicious of the natural scent if it can detect no other odor.

A very successful set can be made by using a combination of the two scents, placing each just as though it were used alone.

Muskeg sets.--In trapping wolves in the islands of southeastern Alaska, where most of the sets are made in the muskeg, a set better than the dry-dirt is made by placing the traps just below the water level, covering the pan with moss and the trap with bog slime kept as wet as possible. Short moss should then be pulled and thrown, a pinch at a time, into the slime. If this is done properly, the moss will keep on growing and the set will be as natural in appearance as the surroundings. Setting the traps below the water level will keep them comparatively free from rust and in perfect working order.

Snow sets.--Snow and ice sets require special care, particularly the former, because snow is very porous and will not exclude the odor of foreign scent on the trap. In sections where the temperature rises and falls intermittently, it is difficult or impossible to operate snow sets. In such places sets in the ice of glacier streams usually prove more successful, because the temperature of ice varies less than that of snow. Care should be used in selecting points that are logical runways and that are not subject to further overflow. The following directions have produced good results wherever followed:

For a snow set, tramp down with snowshoes a half-moon depression along the sled or snowshoe trail and in front of a low bush or similar object. Near the bush make another deep depression the shape of the set trap and drive a peg in the bottom or place the drag, as the case may be. After putting an inch or so of light, screened earth in the bottom, place the trap. Put a flat chip under the loose jaw, and be sure that the trap is solid. Then cover it with half an inch of fine earth (be sure it is dry) so as to incase completely all metal about the trap with dirt. Cover the earth carefully with snow, and leave the scene as natural as possible. Use extreme care not to disturb the snow more than is absolutely necessary, for to drop or to throw the snow onto the traps will cause it to crust, especially when the thermometer is below zero. Leave no abrupt edges and no signs of dirt about the set.

Ice sets.--For an ice set, cut a hole to receive the trap, drive a spike into the bottom, add a few drops of water to freeze the peg in the ice (a small vial of water, holding 2 or 3 tablespoons, should be sufficient to make several sets), and proceed exactly as in making snow sets. Use only large traps for this type of setting. (Six No. 114 traps for snow and ice will catch more coyotes or wolves than 15 of the No. 3 type.) To prevent animals getting away use two traps at a set.

#### Ten "Don'ts" for Trappers

Experience has shown that it pays to observe the following precautions when trapping for wolves and coyotes:

1. Don't go too close to sets when inspecting them.
2. Don't use tobacco along trap lines.
3. Don't spit near a set.
4. Don't take traps or trap kit into living quarters.
5. Don't forget that you can never be quite careful enough.

6. Don't use paraffine to keep traps from rusting.
7. Don't leave an abrupt edge of snow about a set.
8. Don't leave a smear of dirt on the snow.
9. Don't forget to carry refuse at least 50 steps away from a set.
10. Don't get discouraged if your first attempts fail.

### Den Hunting

Predatory animals usually make their dens in such places as banks of ravines and rock slides, or in the side of a knoll if the country is flat or rolling. From a point 100 to 800 yards distant they lie and watch the den for the approach of danger. When the hunter finds one of these lookout posts, the den itself, or at least the immediate surroundings, usually will be in view. The animals use the den year after year, if undisturbed. If the locations of fox dens are known, they may be visited in denning time; but they should not be molested when coyotes or wolves are not using them.

Occasionally wolves breed late in January, but usually early in February, and coyotes about three weeks later than wolves. The period of gestation is nine weeks. Most of the pups are born in April, some earlier, and some later. No doubt whelping time varies somewhat with the climate, and in some sections the heaviest season may be in May. Both wolves and coyotes have from 4 to 12 or more pups to the litter, the average being approximately 7.

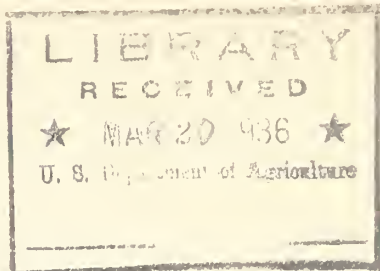
Coyotes and wolves have two or three approaches to their dens, which subdivide not far from the dens, becoming more widely separated. If a number of tracks are noticed going and coming in opposite directions, the den hunter should follow a quarter of a mile or more along their route and make another cross section to see if they are generally narrowing in toward the den. By successive trials of this sort it is sometimes possible to find the den. If the hunter has a dog, the parent coyote will try to lure it away from the den. When two men are hunting, one may hide near the den, and the other may retreat. As soon as the departing man is entirely out of the section, the parents, both of which aid in rearing the young, are almost sure to come up within good rifle range. If a den of pups is approached, even though it is not disturbed, the parents will move the young within perhaps an hour. Consequently, if it is necessary to leave for powder or tools with which to get the pups, the hunter should pen up the young by blocking the mouth of the den with rocks or pieces of wood and then frighten away the old ones by leaving an article of clothing near by.

United States Department of Agriculture Leaflet No. 59, "Hints on Coyote and Wolf Trapping," which deals with conditions on ranges of the Western States, includes illustrations of trap sets and information of value to Alaskan trappers. Copies may be obtained from the Predatory-Animal Control Leader for Alaska (for address see footnote, p. 1), or from the Department of Agriculture, Washington, D. C.



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#### Den Hunting

Predatory animals usually make their dens in such places as banks of ravines and rock slides, or in the side of a knoll if the country is flat or rolling. From a point 100 to 800 yards distant they lie and watch the den for the approach of danger. When the hunter finds one of these lookout posts, the den itself, or at least the immediate surroundings, usually will be in view. The animals use the den year after year, if undisturbed. If the location of fox dens are known, they may be visited in denning time; but they should not be molested when coyotes or wolves are not using them.

Occasionally wolves breed late in January, but usually early in February, and coyotes about three weeks later than wolves. The period of gestation is nine weeks. Most of the pups are born in April, some earlier, and some later. No doubt whelping time varies somewhat with the climate, and in some sections the heaviest season may be in May. Both wolves and coyotes have from 4 to 12 or more pups to the litter, the average being approximately 7.

Coyotes and wolves have two or three approaches to their dens, which subdivide not far from the dens, becoming more widely separated. If a number of tracks are noticed going and coming in opposite directions, the den hunter should follow a quarter of a mile or more along their route and make another cross section to see if they are generally narrowing in toward the den. By successive trials of this sort it is sometimes possible to find the den. If the hunter has a dog, the parent coyote will try to lure it away from the den. When two men are hunting, one may hide near the den, and the other may retreat. As soon as the departing man is entirely out of the section, the parents, both of which aid in rearing the young, are almost sure to come up within good rifle range. If a den of pups is approached, even though it is not disturbed, the parents will move the young within perhaps an hour. Consequently, if it is necessary to leave for powder or tools with which to get the pups, the hunter should pen up the young by blocking the mouth of the den with rocks or pieces of wood and then frighten away the old ones by leaving an article of clothing nearby.

United States Department of Agriculture Leaflet No. 59, "Hints on Coyote and Wolf Trapping," which deals with conditions on ranges of the Western States, includes illustrations of trap sets and information of value to Alaskan trappers. Copies can be obtained from the Department of Agriculture, Washington, D. C.